

For Research Use Only

# CYP51A1 Recombinant antibody

Catalog Number: 84705-4-RR



## Basic Information

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| <b>Catalog Number:</b><br>84705-4-RR       | <b>GenBank Accession Number:</b><br>BC032322                                   | <b>Purification Method:</b><br>Protein A purification                    |
| <b>Concentration:</b><br>1000 ug/ml        | <b>GeneID (NCBI):</b><br>1595  | <b>CloneNo.:</b><br>242166G9   |
| <b>Source:</b><br>Rabbit                   | <b>UNIPROT ID:</b><br>Q16850   | <b>Recommended Dilutions:</b><br>WB: 1:5000-1:50000<br>IHC: 1:250-1:1000 |
| <b>Isotype:</b><br>IgG                     | <b>Full Name:</b><br>cytochrome P450, family 51,<br>subfamily A, polypeptide 1 |  |
| <b>Immunogen Catalog Number:</b><br>AG4235 | <b>Calculated MW:</b><br>509 aa, 57 kDa  |  |
|  | <b>Observed MW:</b><br>56 kDa  |  |

## Applications

### Tested Applications:

WB, IHC, ELISA

### Species Specificity:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB :** HeLa cells, HepG2 cells, HuH-7 cells, HEK-293 cells, RAW 264.7 cells, mouse testis tissue, rat liver tissue

**IHC :** mouse testis tissue,

## Background Information

Lanosterol 14-alpha demethylase (cytochrome P450(51), CYP51A1) belongs to the evolutionarily conserved family of cytochrome P450 and catalyzes one of the key steps in cholesterol biosynthesis. CYP51A1 protein is targeted for degradation when exposed to nitric oxide generated under inflammatory conditions by NOS2 or released from NO donor compounds (PMID: 28830911). CYP51A1 is a prognostic marker in certain cancers, including Cervical squamous cell carcinoma, Head and neck squamous cell carcinoma, Kidney chromophobe, and Kidney renal clear cell carcinoma (PMID: 24711211).

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

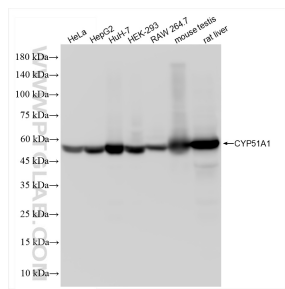
T: 4006900926

E: Proteintech-CN@ptglab.com

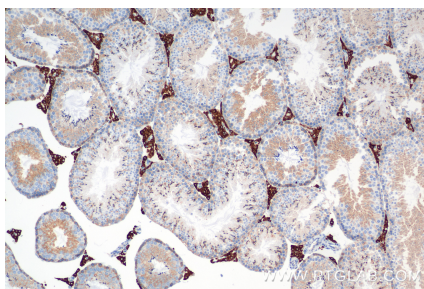
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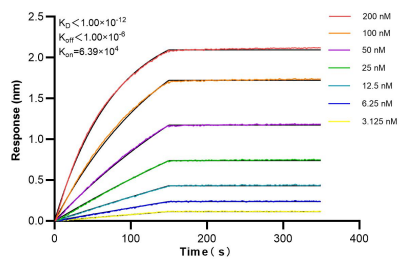
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84705-4-RR (CYP51A1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 84705-4-RR (CYP51A1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84705-4-RR against Human CYP51A1 were performed. The affinity constant is below 1 pM.